

REMARKS

Reconsideration and allowance of the present application are respectfully requested. Claims 1-7 and 10-19 remain pending in the application. By this amendment, claims 1, 15 and 16 are amended.

In numbered paragraph 4, page 2 of the Office Action, independent claims 1, 15 and 16, along with various dependent claims, are rejected as being anticipated by U.S. Patent 5,796,736 (Suzuki). In numbered paragraph 10, page 4 of the Office Action, independent claims 1, 15 and 16, along with various dependent claims, are rejected as being anticipated by U.S. Patent 5,926,463 (Ahearn et al.). In numbered paragraph 14, page 5 of the Office Action, dependent claims 3-7, 13 and 17-19 are rejected as being unpatentable over the Ahearn et al. patent. These rejections are respectfully traversed.

Applicants have disclosed methods and systems that automatically discover nodes of a network, and in particular only the desired node types of the network (paragraph [0001]). The Cisco Discovery Protocol (CDP) is an example of a protocol for discovering devices on a network (e.g., paragraph [0013]). A generated list of CDP nodes is used for a display pertaining to the discovered CDP nodes (e.g., paragraphs [0014] and [0020]). For example, the top window of Fig. 5 shows the complexity of a typical network topology of nodes of various types, but the bottom window shows a list pertaining to the CDP nodes discovered in the network (e.g., paragraph [0020]).

As exemplified in Fig. 2, the discovery process starts, in step 210, by transmitting a signal from a network manager to a first CDP node of the network (e.g., paragraph [0014]). The signal can be an SNMP message that accesses the

CDP MIB of the first CDP node. The CDP MIB contains valuable information about the node and also information of other neighboring CDP nodes on the network. The signal requests information regarding the additional CDP nodes known to the first node. In step 220, the network manager receives a response that identifies additional CDP nodes known to the first CDP node. The transmitting and receiving steps are then repeated for each additional CDP node identified, in step 230. A list containing addresses of all identified nodes is then stored, in step 240.

Applicants have further disclosed that the discovery process can be seeded by either a user input or from previously identified nodes (e.g., paragraph [0016]). For example, the user can be queried to provide a first CDP node information 204. A signal is transmitted from a network manager to the first CDP node of the network. The signal requests information regarding additional CDP nodes on the network (paragraph [0014]). The signal can be an SNMP message that accesses the CDP MIB of the first CDP node (paragraph [0014]). These features can speed the discovery of desired portions of the network.

The foregoing features are broadly encompassed by claim 1 which recites a method of discovering Cisco Discovery Protocol (CDP) nodes in a network of nodes of various types in real time, including, among other features, seeding a discovery process using at least one of querying a user to provide a first CDP node information and searching a database of CDP nodes previously discovered by a network manager to identify a first CDP node; transmitting a signal from the network manager to the first CDP node of the network, wherein the signal requests information contained in a management information base of the first CDP node regarding additional CDP nodes known to the first CDP node; and storing a list containing

addresses of all identified nodes of the CDP type for a selected display pertaining to the identified CDP nodes among the nodes of various types in the network. Claim 15 similarly recites a method for discovering CDP nodes of a network of nodes of various types; and claim 16 similarly recites a computer-based system that discovers Cisco Discovery Protocol (CDP) nodes in a network of nodes of various types in real time.

The Suzuki patent does not teach or suggest a method or a system for discovering Cisco Discovery Protocol (CDP) nodes in a network of nodes of various types in real time. Rather, the Suzuki patent discloses a network management system which recognizes the configuration within an ATM network, including when a router or existing LAN coexists with the ATM network (abstract). However, the Suzuki patent does not teach or suggest a system and method of discovering Cisco Discovery Protocol (CDP) nodes in a network of nodes of various types in real time as claimed.

Claim 1 recites storing a list containing addresses of all identified nodes of the CDP type for a selected display pertaining to the identified CDP nodes among the nodes of various types in the network. The Suzuki patent discloses a network management system connected from outside an ATM network, shown in Fig. 3 as NMS-B. The Suzuki patent discloses that NMS-B recognizes the existence of router 1, along with other switches and terminals within the ATM network (col. 12, lines 12-24). The Suzuki patent does not teach or suggest a selected display capability, identifying CDP nodes among the nodes of various types in the network. As shown in Figs. 1 and 3, the Suzuki patent is directed to displaying an entire ATM network topology made up of various types of nodes, but the Suzuki patent does not teach or

suggest specifically identifying any particular type of node in its data collection and does not teach or suggest selectively displaying nodes of any one particular type in a network of various types of nodes.

The Suzuki patent does not teach or suggest discovering Cisco Discovery Protocol nodes based on 1) seeding a discover process using at least one of querying a user to provide a first CDP node information and searching a database of CDP nodes previously discovered by a network manager to identify a first CDP node, and 2) requesting information contained in a management information base of the first CDP node regarding additional CDP nodes known to the first CDP node, as recited in claims 1, 15 and 16.

The Ahearn et al. patent does not teach or suggest a method or a system for discovering Cisco Discovery Protocol (CDP) nodes in a network of nodes of various types in real time. Rather, the Ahearn et al. patent discloses a method and apparatus for viewing a configuration of a computer network comprising a plurality of switches and routers. The Ahearn et al. patent is directed to ascertaining the status of the disparate links, switches and routers to determine the status of the network and its devices (abstract), but the Ahearn et al. patent does not teach or suggest a system and method of discovering Cisco Discovery Protocol (CDP) nodes in a network of nodes of various types in real time as claimed. The Ahearn et al. patent does not teach or suggest specifically identifying any particular type of node in its data collection and does not teach or suggest selectively displaying nodes of any one particular type in a network of various types of nodes.

The Ahearn et al. patent discloses a tool which enables a network manager to trace a bad route within a routing table from a router back to the source of the route

(col. 11, lines 7-9). The Ahearn et al. patent discloses that "the user must first select a router and enter the destination IP address of the bad route" (col. 11, lines 9-10). The Ahearn et al. patent does not teach or suggest discovering Cisco Discovery Protocol nodes based on 1) seeding a discover process using at least one of querying a user to provide a first CDP node information and searching a database of CDP nodes previously discovered by a network manager to identify a first CDP node, and 2) requesting information contained in a management information base of the first CDP node regarding additional CDP nodes known to the first CDP node, as recited in claims 1, 15 and 16.

For the foregoing reasons, Applicant's claims 1, 15 and 16 are allowable over the Ahearn patent. The remaining claims depend from independent claims 1 and 16 and recite additional advantageous features which further distinguish over the document relied upon by the Examiner. As such, the present application is in condition for allowance.

All objections and rejections raised in the Office Action having been addressed, it is respectfully submitted that the application is in condition for allowance and a Notice of Allowance is respectfully solicited.

Respectfully submitted,

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